

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 114)

FOIL the expressions shown below:

1. $(-8x + 9)(9x - 4)$

$$\begin{aligned} &(-8)(9)x^2 + (-8)(-4)x + (9)(9)x + (9)(-4) \\ &(-72)x^2 + (32)x + (81)x + (-36) \\ &-72x^2 + 113x - 36 \end{aligned}$$

2. $(-7x + 3)(6x + 6)$

$$\begin{aligned} &(-7)(6)x^2 + (-7)(6)x + (3)(6)x + (3)(6) \\ &(-42)x^2 + (-42)x + (18)x + (18) \\ &-42x^2 - 24x + 18 \end{aligned}$$

3. $(-2x + 8)(6x - 9)$

$$\begin{aligned} &(-2)(6)x^2 + (-2)(-9)x + (8)(6)x + (8)(-9) \\ &(-12)x^2 + (18)x + (48)x + (-72) \\ &-12x^2 + 66x - 72 \end{aligned}$$

4. $(-8x - 3)(-2x + 2)$

$$\begin{aligned} &(-8)(-2)x^2 + (-8)(2)x + (-3)(-2)x + (-3)(2) \\ &(16)x^2 + (-16)x + (6)x + (-6) \\ &16x^2 - 10x - 6 \end{aligned}$$

5. $(7x + 4)(-8x + 9)$

$$\begin{aligned} &(7)(-8)x^2 + (7)(9)x + (4)(-8)x + (4)(9) \\ &(-56)x^2 + (63)x + (-32)x + (36) \\ &-56x^2 + 31x + 36 \end{aligned}$$

FOIL the expressions shown below:

6. $(-5x + 2)(-7x + 7)$

$$\begin{aligned} &(-5)(-7)x^2 + (-5)(7)x + (2)(-7)x + (2)(7) \\ &(35)x^2 + (-35)x + (-14)x + (14) \\ &35x^2 - 49x + 14 \end{aligned}$$

7. $(2x - 7)(4x - 5)$

$$\begin{aligned} &(2)(4)x^2 + (2)(-5)x + (-7)(4)x + (-7)(-5) \\ &(8)x^2 + (-10)x + (-28)x + (35) \\ &8x^2 - 38x + 35 \end{aligned}$$

8. $(-4x + 8)(7x + 8)$

$$\begin{aligned} &(-4)(7)x^2 + (-4)(8)x + (8)(7)x + (8)(8) \\ &(-28)x^2 + (-32)x + (56)x + (64) \\ &-28x^2 + 24x + 64 \end{aligned}$$

9. $(-8x - 7)(-7x - 3)$

$$\begin{aligned} &(-8)(-7)x^2 + (-8)(-3)x + (-7)(-7)x + (-7)(-3) \\ &(56)x^2 + (24)x + (49)x + (21) \\ &56x^2 + 73x + 21 \end{aligned}$$

10. $(3x - 2)(-6x - 8)$

$$\begin{aligned} &(3)(-6)x^2 + (3)(-8)x + (-2)(-6)x + (-2)(-8) \\ &(-18)x^2 + (-24)x + (12)x + (16) \\ &-18x^2 - 12x + 16 \end{aligned}$$